DOCUMENT RESUME

ED 101 000 TM 004 125

AUTHOR	Casteel, J. Doyle; Stahl, Robert J.
TITLE	The Social Science Observation Record (SSOR). Introductory Packet. Resource Monograph No. 7.
INSTITUTION	Florida Univ., Gainesville. P. K. Yonge Lab. School.
REPORT NO	RM-7
PUB DATE	73
NOTE	15p.; For related documents, see TM 004 126-127
AVAILABLE FROM	P.K. Yonge Laboratory School, University of Florida, Gainesville, Florida 32611 (Free)
EDRS PRICE	MF-$0.75 HC Not Available from EDRS. PLUS POSTAGE
DESCRIPTORS	*Classroom Observation Techniques; *Interaction Process Analysis; Matrices; Microteaching; *Models; Preservice Education; *Records (Forms); *Social Sciences; Student Behavior; Teacher Behavior; Values
IDENTIFIERS	*Social Science Observation Record; SSOR

ABSTRACT

The Social Science Observation Record (SSOR) is an interaction analysis-systematic observation scheme enabling users to engage in interaction analysis as a descriptive record. Pilot studies suggest that the knowledge of the system enables pre-service social studies teachers (using microteaching simulation) to modify their own behavior in directions toward which they feel positive. The system also provides a conceptual model linking cognitive, affective, and management dimensions of social studies inquiry. The SSOR contains seventeen categories, four realms, twelve sub-matrices, and six segments of "wait time." Realm I contains five categories stressing verbal behaviors related to learning subject matter. Five other categories of verbal statements (Realm III) stress the meaning of human experience, knowledge, values, thought, and behavior for man. A third set of five categories (Realm II) stresses verbal statements through which social inquiry can be influenced and managed. The sixteenth category provides for "wait time" and the seventeenth records descriptive noise. Together, these two categories comprise Realm IV of the SSOR. (Author/RC)

ED 000 000

BEST COPY AVAILABLE

THE SOCIAL SCIENCE OBSERVATION RECORD (SSOR)

Introductory Packet

(Revised February 21, 1973)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

J. Doyle Casteel
Department of Secondary Education

and

Robert J. Stahl
P.K. Yonge Laboratory School

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL BY MICROFICHE ONLY HAS BEEN GRANTED BY
J. DOYLE CASTEEL
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER.

P. K. YONGE LABORATORY SCHOOL
RESEARCH AND DEVELOPMENT
P.K. YONGE LABORATORY SCHOOL
COLLEGE OF EDUCATION
UNIVERSITY OF FLORIDA
GAINESVILLE 32611

TM 004 125

Resource Monograph Number 7

Copyright 1973

SSOR-The Social Science Observation Record

The Social Science Observation Record (SSOR) is an interaction analysis-systematic observation scheme. The system enables its users to engage in interaction analysis as a descriptive record. Pilot studies suggest that the knowledge of the system enables pre-service social studies teachers (using micro-teaching simulation) to modify their own behavior in directions toward which they feel positive. The system also provides a conceptual model linking cognitive, affective, and management dimensions of social studies inquiry.

The SSOR contains seventeen (17) categories, four (4) realms, twelve (12) sub-matrices and six (6) segments of "wait time". Realm I is comprised of five categories stressing verbal behaviors related to learning subject matter. These subject-centered categories are topical, empirical, interpretive, defining, and clarifying. Five other categories of verbal statements (Realm III) stress the meaning of human experience, knowledge, values, thought, and behavior for man. These man-centered categories are called preferential, consequential, criterial, imperative, and emotive. A third set of five categories (Realm II) stresses verbal statements through which social inquiry can be influenced and managed. These teacher-centered categories are called infirming, commentary, dissonant, interrogative, and confirming. The sixteenth category provides for "wait time" and the seventeenth records disruptive noise. Together these two categories (Silence and Confusion) comprise the fourth realm (Realm IV) of the SSOR.

The categories included in the system encourage the teacher to think in terms of language configurations. Subject-centered categories yield language configurations symtomatic that knowing and thinking are occurring. Man-centered categories yield language configurations indicating that values are being clarified. In combination these two realms (Subject-Centered and Man-Centered) generate patterns of language suggesting that value clarification is occurring in light of accurate conceptualization, and contrary-wise, that efforts at value clarification are being conceptualized and made available for reflective study. The third set of categories (Realm II) provides alternative patterns for influencing behavior which either the teacher or the students may use to elicit categories and configurations of language functional to social inquiry. The two Non-verbal categories indicate the relationship (s) between the nonverbal and verbal behaviors occurring during classroom interaction.

The SSOR may be applied to teacher and student behaviors in a number of ways. The following are illustrative of some of its uses:

1) To become more sensitive to language patterns being employed in the classroom;
2) To collect objective, descriptive data relevant to instructional objectives;
3) To operationalize instructional theories, strategies, and techniques; and
4) To help teachers shape their verbal patterns of behavior to fit their purposes.

The intent of this 'introductory packet' is to initiate you to the concepts and vocabulary employed by the SSOR and to enable you to interpret SSOR data in light of your own instructional objectives.

THE SSOR: AN OVERVIEW OF FUNCTIONS*

REALM	CATEGORY OF STATEMENT	FUNCTION**
I. Subject-Centered	1. Topical	identifying the focus
	2. Empirical	stating facts
	3. Interpretive	assigning meaning
	4. Defining	avoiding semantical confusion
	5. Clarifying	elaborating ideas
II. Teacher-Centered	6. Infirming	critizing
	7. Commentary	consolidating and structuring
	8. Dissonant	requesting clarification
	9. Interrogative	elicting responses
	10. Confirming	reinforcing
III. Man-Centered	11. Preferential	assigning value ratings
	12. Consequential	anticipating effects
	13. Criterial	identifying the basis
	14. Imperative	considering decisions
	15. Emotive	expressing feelings
IV. Non-Verbal	16. Silence	wait time
	17. Confusion	adjustment time

* The functions as given are meant to be illustrative but not inclusive. (Source: J. Doyle Casteel and Robert J. Stahl, c. 1972

BEST COPY AVAILABLE

SSOR: SHORT DEFINITIONS*

REALM	CATEGORY OF STATEMENT	SHORT DEFINITIONS
I. SUBJECT-CENTERED	1. Topical	Student statements identifying the theme, unit, concept, issue, or problem on which group discussion is focused.
	2. Empirical	Student statements providing verifiable data from memory, observation, reading, or oral presentation.
	3. Interpretive	Student statements assigning meaning to data or experience and expressed as notions, opinions, comparisons, relationships, and connections.
	4. Defining	Student statements as to the meaning of a word or concept by reference to an accepted source, by context, by examples, by operant criteria, or by ideal type.
	5. Clarifying	Student statements rewording, rephrasing, elaborating on, or expanding on other statements by way of explanation.
II. TEACHER-CENTERED	6. Infirming	Teacher or student statements of rejection, criticism, closure, or dissatisfaction expressed sarcastically, doctrinally, or negatively.
	7. Commentary	Teacher or student statements reviewing or summarizing the directions of a group; or, teacher statements summarizing, consolidating, structuring, providing new information, new directions, or responding to student requests for information.
	8. Dissonant	Teacher or student statements indicating that what is being said is not understood, is causing confusion, or lacks either internal or external consistency.
	9. Interrogative	Teacher or student questions expressed during group interaction.
	10. Confirming	Teacher or student statements expressing acceptance, satisfaction, encouragement, or praise.
III. MAN-CENTERED	11. Preferential	Student statements assigning a value rating or classification to an idea, person, group, object, etc.
	12. Consequential	Student statements identifying the known or anticipated effects of an action, idea, object, feeling, etc.
	13. Criterial	Student statements identifying the basis for a decision, a judgement, an action, an interpretation, etc.; or, developing a table of specifications for use in decision-making.
	14. Imperative	Student statements of what should or should not be; of what ought or ought not to be done; or expressing a decision achieved by the group.
	15. Emotive	Student statements indicating personal feelings; or, efforts to express empathy, regarding the personal feelings of others.
IV. NON-VERBAL	16. Silence	Period indicating quiet, absence of verbal interaction, reading, thinking, non-verbal activities, or work.
	17. Confusion	Verbal or non-verbal interference or commotion causing communication difficulties within the group.

All teacher-talk must be recorded in one of the control categories
Student statements may also be recorded in the control realm.

*J. Doyle Casteel and Robert J. Stahl. (c. 1973)

Code No. _____

SSOR DATA COLLECTION FORM

(Casteel and Stahl)

16

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

OBSERVED _____ DATE ___/___/7 TOPIC _____

OBSERVOR _____ PLACE _____ TIME _____

OTHER _____

Code No. Sample

SSOR DATA COLLECTION FORM

(Casteel and Stahl)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
16																
7	3	(16)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

OBSERVED Sample for demonstration DATE 1 17 TOPIC _____

OBSERVOR _____ PLACE _____ TIME _____

OTHER _____

BEST COPY AVAILABLE

SSOR SCATTER DIAGRAM
J. Doyle Casteel and Robert J. Stahl (c. 1972)

Code No. _____

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
Total																		

Observed: _____ Date: ___/___/ 73___ Topic: _____

SOCIAL SCIENCE OBSERVATION RECORD (SSOR) MATRIX

J. Doyle Casteel and Robert J. Stahl (c. 1973)
College of Education, University of Florida

	1. Topical	2. Empirical	3. Interpretive	4. Defining	5. Clarifying	6. Infirming	7. Commentary	8. Dissonant	9. Interrogative	10. Confirming	11. Preferential	12. Consequential	13. Criterial	14. Imperative	15. Emotive	16. Silence	17. Confusion
1. Topical																	
2. Empirical																	
3. Interpretive																	
4. Defining																	
5. Clarifying																	
6. Infirming																	
7. Commentary																	
8. Dissonant																	
9. Interrogative																	
10. Confirming																	
11. Preferential																	
12. Consequential																	
13. Criterial																	
14. Imperative																	
15. Emotive																	
16. Silence																	
17. Confusion																	

SOCIAL SCIENCE OBSERVATION RECORD (SSOR) MATRIX

J. Doyle Casteel and Robert J. Stahl (c. 1973)
College of Education, University of Florida

Code_____

	1. Topical	2. Empirical	3. Interpretive	4. Defining	5. Clarifying	6. Infirming	7. Commentary	8. Dissonant	9. Interrogative	10. Confirming	11. Preferential	12. Consequential	13. Criterial	14. Imperative	15. Emotive	16. Silence	17. Confusion	Total
1. Topical																		
2. Empirical																		
3. Interpretive																		
4. Defining																		
5. Clarifying																		
6. Infirming																		
7. Commentary																		
8. Dissonant																		
9. Interrogative																		
10. Confirming																		
11. Preferential																		
12. Consequential																		
13. Criterial																		
14. Imperative																		
15. Emotive																		
16. Silence																		
17. Confusion																		
Totals (No.)																		
Totals (%)																		

REALM TOTALS/% I ____ / ____ % II ____ / ____ % III ____ / ____ % IV ____ / ____ %

Total Count _____ Cells Reached (289) _____ Categories Used (17) _____
Extended State Cells (17) _____ Ext. State Cell Freq. _____ 7-9 Count _____

Subm. Use (No.): A___ B___ C___ D___ E___ F___ G___ H___ I___ J___ K___ L___ TOTAL___
Sub. Use (%): A___ B___ C___ D___ E___ F___ G___ H___ I___ J___ K___ L___ TOTAL___
Sub. Use (Cells): A___ B___ C___ D___ E___ F___ G___ H___ I___ J___ K___ L___ TOTAL___

Name of Observed_____ Date___/___/7___ Place_____

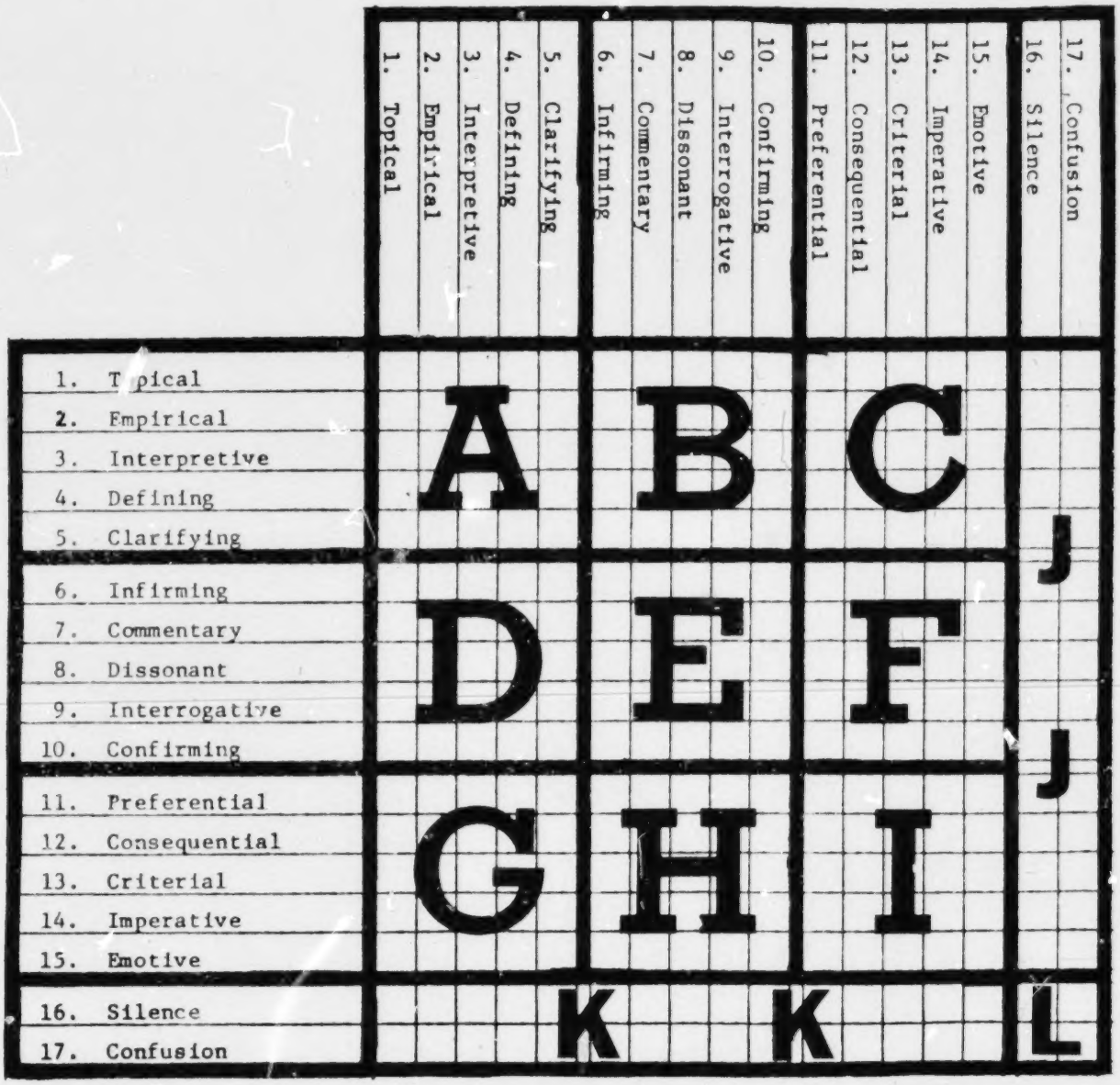
Observer_____ Conditions_____ Topic_____

Time Observed___ min./___ sec. Total Time___ min./___ sec. Sex: M F Age_____

Other_____

The Twelve Submatrices of the Social Science Observation Record

J. Doyle Casteel and Robert J. Stahl (c. 1973)
College of Education, University of Florida



DESCRIPTION OF SSOR SUBMATRICES*

SUBMATRIX	DESCRIPTION
A	twenty five (25) cells showing patterns of student Subject-Centered statements following student Subject-Centered statements.
B	twenty-five (25) cells showing patterns of teacher or student Teacher-Centered statements following student Subject-Centered statements.
C	twenty-five (25) cells showing patterns of student Man-Centered statements following student Subject-Centered statements.
D	twenty-five (25) cells showing patterns of student Subject-Centered statements following teacher or student Teacher-Centered statements.
E	twenty-five (25) cells showing patterns of teacher or student Teacher-Centered statements following teacher or student Teacher-Centered statements
F	twenty-five (25) cells showing patterns of student Man-Centered statements following teacher or student Teacher-Centered statements.
G	twenty-five (25) cells showing patterns of student Subject-Centered statements following student Man-Centered statements.
H	twenty-five (25) cells showing patterns of teacher or student Teacher-Centered statements following student Man-Centered statements.
I	twenty-five (25) cells showing patterns of student Man-Centered statements following student Man-Centered statements.
J	thirty (30) cells showing patterns of Non-Verbal behaviors following teacher and student verbal behaviors
K	thirty (30) cells showing patterns of teacher or student verbal statements following Non-Verbal statements.
L	four (4) cells showing patterns of Non-Verbal behaviors following other Non-Verbal behaviors.

*Submatrices enable the teacher or researcher to collect and quantify different aspects of classroom verbal and non-verbal behavior patterns.

J. Doyle Casteel and Robert J Stahl, (c. 1973)

SSOR Submatrices

A Diagram of Realm Relationships

		Subject-centered Realm 1. 2. 3. 4. 5.	Teacher-centered Realm 6. 7. 8. 9. 10.	Man-centered Realm 11. 12. 13. 14. 15.	Non-verbal Realm 16. 17.
Subject-centered Realm	1. 2. 3. 4. 5.	Student Followed by Student A	Student Followed by Teacher B	Student Followed by Student C	Verbal followed by non-verbal behavior J
Teacher-centered Realm	6. 7. 8. 9. 10.	Teacher Followed by Student D	Teacher Followed by Teacher E	Teacher Followed by Student F	
Man-centered Realm	11. 12. 13. 14. 15.	Student Followed by Student G	Student Followed by Teacher H	Student Followed by Student I	
Non-verbal Realm	16. 17.	Non-verbal followed by verbal behavior K			Non-verbal followed by Non-verbal L

BACKGROUND : MATRIX ON VIOLENCE AND AMERICAN POLITICS

Setting:	A public junior high school
Students:	Seventh graders in a conventional group of approximately 30 studying humanities.
Source of Objectives:	The student teacher being observed selected and stated his own objectives.
Objectives:	1. List social and political consequences of the assassination attempt directed at Governor Wallace 2. Develop some steps Americans might take to reduce violence in American society and politics.

SOCIAL SCIENCE OBSERVATION RECORD (SSOR) MATRIX

J. Doyle Casteel and Robert J. Stahl (c. 1973)
College of Education, University of Florida

Code Sample

	1. Topical	2. Empirical	3. Interpretive	4. Defining	5. Clarifying	6. Infirming	7. Commentary	8. Dissonant	9. Interrogative	10. Confirming	11. Preferential	12. Consequential	13. Criterial	14. Imperative	15. Emotive	16. Silence	17. Confusion	Total
1. Topical																		0
2. Empirical		16	3			3	1			2				1			5	31
3. Interpretive		3	11				2	1	1	1	1			1				21
4. Defining																		0
5. Clarifying																		0
6. Infirming		2	1			4	3	1	1							1	4	17
7. Commentary		2	4				11	1		1					1	1	4	25
8. Dissonant		5				5	6	2						2	1	2		23
9. Interrogative			1						1		1							3
10. Confirming						1	1	2									2	6
11. Preferential						1									1			2
12. Consequential																		0
13. Criterial																		0
14. Imperative						1								3			3	7
15. Emotive		2				1												3
16. Silence		1	1			1	1											4
17. Confusion								16		2								18
Totals (No.)	0	31	21	0	0	17	25	23	3	6	2	0	0	7	3	4	18	160
Totals (%)	0	19	13	0	0	11	16	14	2	4	1	0	0	4	2	2	11	99

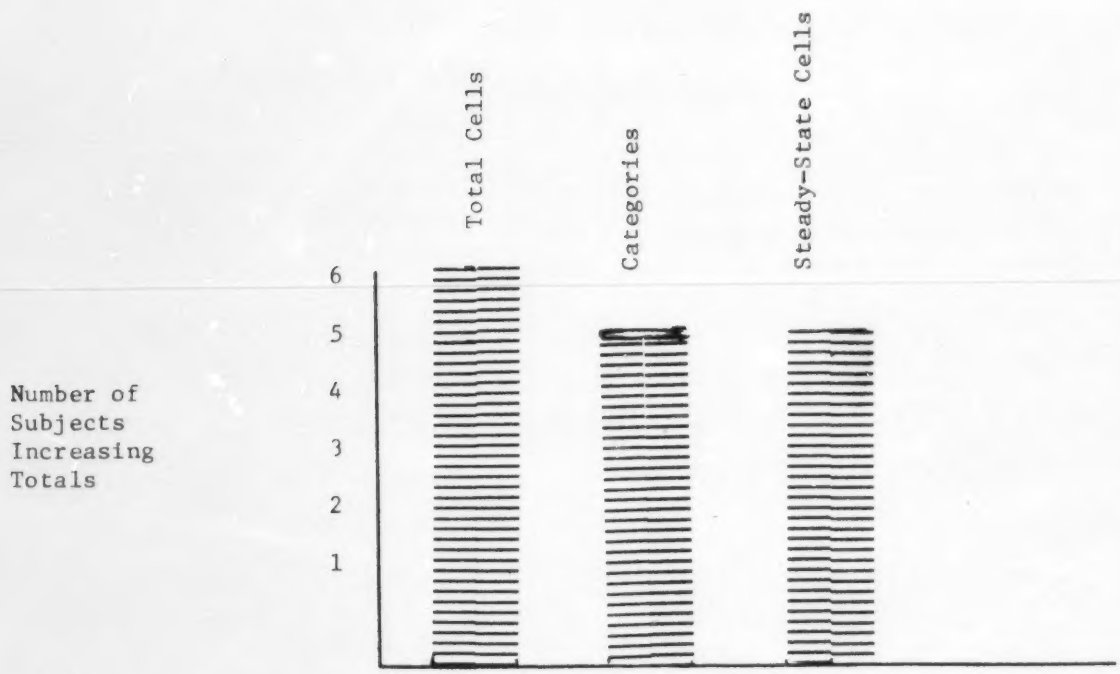
REALM TOTALS/% I 52 / % II 74 / % III 12 / % IV 22 / %

Total Count 160 Cells Reached (289) 58 Categories Used (17) 12
Extended State Cells (17) 7 Ext. State Cell Freq. 48 7-9 Count 0

Subm. Use (No.): A 33 B 11 C 3 D 15 E 40 F 5 G 2 H 3 I 4 J 22 K 22 L 0 TOTAL 160
Sub. Use (%): A B C D E F G H I J K L TOTAL
Sub. Use (Cells): A 4 B 7 C 3 D 6 E 14 F 4 G 1 H 3 I 2 J 8 K 6 L 0 TOTAL 58

Pre-Post Behavioral Modification Study Using the SSOR as the Intervention

Report on a study using six interns from February 22 to March 2, 1972 data collected at P. K. Yonge Laboratory School.



Raw Data Reported:*

Total Cells Used

Subj.	1st	2nd	Diff.
A	44	57	+13
B	74	75	+ 1
C	70	77	+ 7
D	59	85	+26
E	36	58	+22
F	58	60	+ 2
MEAN	56.8	68.8	+11.8

Categories Used

Subj.	1st	2nd	Diff.
A	10	12	+ 2
B	13	14	+ 1
C	15	14	- 1
D	13	14	+ 1
E	11	14	+ 3
F	12	13	+ 1
MEAN	12.3	13.5	+ 1.2

Steady-state Cells Used

Subj.	1st	2nd	Diff.
A	7	9	+ 2
B	9	12	+ 3
C	10	9	- 1
D	8	11	+ 2
E	6	9	+ 3
F	9	10	+ 1
MEAN	8.2	10.0	+ 1.8

* At the time of this study, the Social Science Observation Record (SSOR) had only 16 categories and 256 cells.